### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015313 Address: 333 Burma Road **Date Inspected:** 22-Jun-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Zhu Feng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: Tower Components** 

**Summary of Items Observed:** 

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

## **TOWER JETTY**

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 11 located on West tower Lift-2 doubler plate to small doubler strut plate WSD1 – SA340B/F. Welder is identified as 040619. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3212 - B - U2a - 2. (See attached photo)

Weld joint # 25 located on East tower Lift-2 doubler plate to small doubler strut plate ESD1 – SA300B/F. Welder is identified as 202100. ZPMC Quality Control (QC) Inspector is identified Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3212 - B - U2a - 2.

Witness of Ultrasonic Testing (UT)

This QA inspector Witnessed 100% UT performed by ZPMC Quality Control personnel. During the process ZPMC UT technician found Two (2) class 'A' non conforming indications as per AWSD1.5 Table 6.3. The member is identified as Tower Component. The component and weld designation identified as follows:

## WELDING INSPECTION REPORT

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SOUTH TOWER LIFT-2, DOUBLER PLATE TO CROSS BRACING GUSSET PLATE SSD1 - SA164B/F - 11(See attached photo)

#### **BAY#10**

This QA Inspector observed the following work in progress Shielded Metal Arc Welding (SMAW):

Weld joint # 3B located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 6. Welder is identified as 050266. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint #4A located on Lift-5 Splice Plate Stiffener NSD1 – SPSA5 – 6. Welder is identified as 044511. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

#### BAY#11

This QA Inspector observed the following work in progress Shielded Metal Arc Welding (SMAW):

Weld joint # 37 located on Tower Strut WD1 – STSA4 – 5 – 123M – 1. Welder is identified as 044551. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2113.

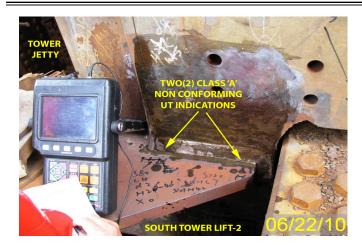
Weld joint # 36 located on Tower Strut wD1 – STSA4 – 5 – 143M – 1. Welder is identified as 251194. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2112.

Weld joint #44 located on Tower Strut WD1 – STSA4 – 5 – 123M – 1. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS -B - T - 4113 - 1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

No Relevant Conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer